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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,143	03/31/2004	Angel Stoyanov	WEYE121925/25324	8224

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EXAMINER	
CORDRAY, DENNIS R	
ART UNIT	**PAPER NUMBER**
1731	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/815,143	STOYANOV ET AL.	
	Examiner	Art Unit	
	Dennis Cordray	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/9/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1,5 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herron et al (5549791) in view of Neogi et al (US 2003/0208859).

Herron et al claims polyacrylic acid crosslinked cellulosic fibers (col 5, lines 50-51). Herron et al teaches that the crosslinked fibers can be bleached (col 13, lines 14-16). A method for producing the fibers is disclosed (col 10 line 27 through col 13, line 16). Herron et al also teaches the fibers can be used in absorbent products such as paper towels, diapers, sanitary napkins, catamenials and other similar products.

Herron et al does not that the bleached fibers have a Whiteness Index greater than unbleached fibers.

Neogi et al teaches that bleaching indirectly elevates whiteness and that consumer preference is toward a brighter and whiter product (par 2 and 3).

The art of Herron et al, Neogi et al and the claimed invention are analogous because they are from the same art of treating cellulosic fibers. It would have been obvious at the time the invention was made to a person with ordinary skill in the art to obtain greater whiteness by bleaching the fibers in the process of Herron et al in view of Neogi et al to make the crosslinked fibers appealing to customers.

2. Claims 3, 4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herron et al in view of Neogi et al and further in view of Cook et al (5562740).

Herron et al and Neogi et al do not teach bleaching with hydrogen peroxide or with sodium chloride.

Cook et al discloses individualized polycarboxylic acid crosslinked fibers with a brightness of 86 after bleaching in an aqueous solution of sodium hydroxide and hydrogen peroxide (col 3, lines 42-45). Cook further discloses an amount of sodium hydroxide to be applied of about 0.07 weight % to about 1.8 weight % of the dry fibers and an amount of hydrogen peroxide to be applied of about 0.02 weight % to about 1.5 weight % of the dry fibers (col 4, lines 42-45 and 49-51). The disclosed ranges of Cook et al for sodium hydroxide and hydrogen peroxide concentrations substantially overlap the claimed ranges.

The art of Herron et al, Neogi et al, Cook et al and the claimed invention are analogous because they are from the same art of treating cellulosic fibers. It would have been obvious at the time the invention was made to a person with ordinary skill in the art to use the claimed concentration ranges of sodium hydroxide and hydrogen peroxide as bleaching agents in the process of Herron et al in view of Neogi et al and further in view of Cook et al to make the crosslinked fibers appealing to customers.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herron et al (5549791) in view of Neogi et al and further in view of Cook et al and Wang et al (2002/0157189).

Herron et al and Neogi et al do not teach bleached fibers having a CIE Whiteness Index greater than 75.0.

Wang et al gives examples of woven fabric bleached with sodium hydroxide and hydrogen peroxide that have a CIE Whiteness of greater than 75.0 (P 8 and 9, Tables I and II). Wang et al also teaches that the bleaching can be used with cellulosic materials such as cotton, linen, silk, hemp, flax and jute (p 8, par 96).

The art of Herron et al, Neogi et al, Wang et al and the instant invention are analogous art as they deal with treatment of cellulosic fibers. It would have been obvious at the time the invention was made to a person with ordinary skill in the art to obtain the claimed brightness in the process of Herron et al in view of Neogi et al and further in view of Cook et al and Wang et al to make the crosslinked fibers appealing to customers.

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

4. Claims 1-4 and 10-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 9 and 10 of copending Application No. 10/815206 in view of Frate et al (6211296).

- Claims 1 and 2 of the instant application are obvious in view of Claim 1 of the copending application and further in view of Frate et al. Claim 1 of the copending application recites bleached crosslinked cellulosic fibers having a Whiteness Index greater than similarly crosslinked unbleached fibers. Claim 1 of the copending application further recites the crosslinking agent in the presence of a C_4-C_{12} polyol. Frate et al teaches polyacrylic acid with a polyol as one of many possible polymer crosslinking agents (col 10, lines 15-21). It would have been obvious to one of ordinary skill in the art to use polyacrylic acid with a polyol as a known crosslinking agent to crosslink the fibers of Claim 1 of the instant application.
- Claims 3 and 4 of the instant application read the same as Claims 9 and 10 of the copending application.
- Claims 10, 11 and 12 of the instant application read substantially the same as Claims 14, 16 and 15 of the copending application.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

Applicants' arguments filed 27 October, 2005 have been fully considered but they are not persuasive. The reasons are as follows:

Rejection of Claims 1, 5, and 10-12 Under 35 U.S.C. §102

The rejection has been withdrawn in view of the amendments to the claims.

Rejection of Claims Under 35 U.S.C. §103(a)

Applicants have argued that the Neogi reference cannot be used as prior art against the instant application pursuant to 35 U.S.C. §103(c)(1) because it is a §102(e) reference with respect to the present application and, like the present application, is assigned to Weyerhaeuser Company. However, the Neogi reference is a valid reference under 35 U.S.C. §102(a) and thus can still be used in a rejection under 35 U.S.C. §103(a).

With respect to the rejection of claims 3, 4 and 6-9, Applicants have argued that the Herron reference teaches away from bleaching crosslinked fibers by suggesting that bleaching steps have been found to adversely affect WRV. Herron et al states only that "post-crosslinking bleaching steps have been found to affect WRV." There is no statement that the bleaching has an adverse affect. Furthermore, although Herron et al does not disclose post-crosslink bleaching as a preferred step, it is disclosed as a recognized treatment for polyacrylic acid crosslinked fibers.

Applicants have also argued that the Cook reference relates only to C_2-C_9 polycarboxylic acids as crosslinking agents and does not pertain to bleaching of fibers that have been crosslinked using polyacrylic acid. The bleaching agents disclosed by Cook et al are well known and it would have been obvious to use a known bleaching agent for the post-crosslink bleaching disclosed by Herron et al.

With regard to the provisional obviousness-type double patenting rejection, applicants' intention to file a terminal disclaimer on the Examiner's indication of allowable subject matter is noted.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DRC

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